CLAIMS

- 1. A color-image forming method in a silver halide color photographic light-sensitive material comprising a support and photographic constituent layers including at least one blue-sensitive silver halide emulsion layer containing a yellow-dye-forming coupler, at least one green-sensitive silver halide emulsion layer containing a magenta-dye-forming coupler, at least one red-sensitive silver halide emulsion layer containing a cyan-dye-forming coupler, and at least one light-insensitive hydrophilic colloid layer,
- 10 which comprises the steps of:

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performing image-wise exposure of the light-sensitive material cut into sheets; and

subjecting the exposed light-sensitive material sheets to photographic processing including a color development process, a bleach-fix process, a rinsing process and a drying process, while conveying the exposed light-sensitive material sheets by means of pairs of conveying rollers; wherein the sheet conveying speed in the photographic processing being 40.0 mm/sec to 100 mm/sec;

wherein the silver halide color photographic light-sensitive material to be exposed contains any one component selected from the group consisting of:

- at least one dye-forming coupler represented by the following formula
 (IA),
 - 2) at least one compound represented by the following formula (I), and
- 3) 1.4 mg/m² or more of at least one compound represented by the following formula (II);

Formula(|A)

wherein, in formula (IA), R' and R" each independently represent a substituent, and Z represents a hydrogen atom, or a group capable of being split-off in a coupling reaction with an oxidized product of an aromatic primary amine color-developing agent;

Formula (I)

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wherein, in formula (I), A represents a substituted or unsubstituted alkyl group, and M represents a cation; and

Formula (II)

wherein, in formula (II), M represents a cation; and R represents an atom having an atomic weight of 100 or lower, or a group having a total molecular weight of 100 or lower.

- 2. The color-image forming method as claimed in claim 1, wherein the silver halide color photographic light-sensitive material to be exposed contains at least one dye-forming coupler represented by the following formula (M-1) and the at least one dye-forming coupler represented by formula (IA) described above; and
- wherein the color development process, the bleach-fix process and the drying process in the photographic processing are finished within 18 seconds, 18 seconds and 26 seconds, respectively;

Formula (M-1)

wherein, in formula (M-I), R₁, R₂, and R₃ each independently represent a

hydrogen atom or a substituent; one of Za and Zb represents a carbon atom
having a hydrogen atom or a substituent, and the other represents a nitrogen
atom; the substituent of Za or Zb may further have a substituent; and X
represents a hydrogen atom or a group capable of being split-off upon a reaction
with an oxidized product of an aromatic primary amine color-developing agent.

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3. The color-image forming method as claimed in claim 2, wherein the rinsing process uses a tank structurally partitioned into a plurality of

rooms with blade-form members for passing the light-sensitive material cut into sheets through rinse solutions in a horizontal direction.

- 4. The color-image forming method as claimed in claim 2,
 5 wherein the conveying speed in the photographic processing is from 45.0 mm/sec to 95 mm/sec.
- 5. The color-image forming method as claimed in claim 2,
 wherein the dye-forming coupler represented by the formula (M-1) is a dye forming coupler represented by the following formula (M-III);

Formula (M - III)

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wherein, in formula (M-III), R_1 , R_2 , R_3 and R_4 each independently represent a hydrogen atom or a substituent; and X represents a hydrogen atom or a group capable of being split-off upon a reaction with an oxidized product of an aromatic primary amine color-developing agent.

6. The color-image forming method as claimed in claim 2, wherein the hydrophilic colloid layer is a layer made up of gelatin hardened substantially with a hardener represented by the following formula (HI);

Formula (HI)

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wherein, in formula (HI), X^{a1} and X^{a2} each represent -CH=CH₂ or -CH₂CH₂Y independently; X^{a1} and X^{a2} may be the same or different; Y represents a group capable of being replaced with a nucleophilic group or released in the form of HY by reaction with a base; and L represents a divalent linkage group, which may be substituted.

- 7. The color-image forming method as claimed in claim 1, wherein the silver halide color photographic light-sensitive material to be exposed contains at least one dye-forming coupler represented by formula (IA) described above in at least one of the red-sensitive emulsion layers; wherein the light-sensitive material cut into sheets is conveyed at a speed of 42.0 mm/sec to 100 mm/sec in the photographic processing; and wherein the rinsing process uses a tank structurally partitioned into a plurality of rooms with blade-form members for passing the photographic material cut into sheets through rinse solutions in a horizontal direction.
- 8. The color-image forming method as claimed in claim 7,
 wherein the image-wise exposure is performed using a scanning exposure
 method on a per-pixel exposure time setting of 1 x 10⁻³ second or shorter.
 - 9. The color-image forming method as claimed in claim 7, wherein a total coating amount of silver in the silver halide color photographic light-sensitive material is 0.50 g/m² or below.

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10. The color-image forming method as claimed in claim 7,

wherein the silver halide color photographic light-sensitive material contains at least one compound represented by the following formula (M-II) in at least one green-sensitive silver halide emulsion layer;

Formula (M-II)

wherein, in formula (M-II), R₁, R₂, R₃ and R₄ each independently represent a hydrogen atom or a substituent; and X represents a hydrogen atom, or a group capable of being split-off in a coupling reaction with an oxidized product of an aromatic primary amine color-developing agent.

- 11. The color-image forming method as claimed in claim 7, wherein a processing time in the rinsing process is from 5 seconds to 25 seconds and a processing temperature in the rinsing process is from 40°C to 50°C.
- 12. The color-image forming method as claimed in claim 1, wherein the silver halide color photographic light-sensitive material comprises at least one compound represented by formula (I) described above, and wherein the silver halide color photographic light-sensitive material is processed by use of a processing machine in which conveying of the silver halide color photographic material is performed by nipping conveying with two or more pairs of conveying rollers.
 - 13. The color-image forming method as claimed in claim 1,

wherein the silver halide color photographic light-sensitive material contains a compound represented by the above formula (II) in an amount of 1.4 g/m², and wherein conveying of the silver halide color photographic light-sensitive material is performed by nipping conveying with two or more pairs of conveying rollers.

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- 14. The color-image forming method as claimed in claim 12, wherein the image-wise exposure is performed using a scanning exposure method on a per-pixel exposure time setting of 1×10^{-4} second or shorter.
- 15. The color-image forming method as claimed in claim 12, wherein the color-development process is performed at a processing time setting of 20 seconds or below.
- 16. A color-image forming method in a silver halide color photographic light-sensitive material comprising a support and photographic constituent layers including at least one blue-sensitive silver halide emulsion layer containing a yellow-dye-forming coupler, at least one green-sensitive silver halide emulsion layer containing a magenta-dye-forming coupler and at least one red-sensitive silver halide emulsion layer containing a cyan-dye-forming coupler, comprising the steps of:

subjecting the light-sensitive material to a scanning exposure at a subscan conveying speed of 90 mm/sec or more; and

conducting a color-forming photographic processing; wherein at least one of the silver halide emulsion layers to be exposed contains a silver halide emulsion having a silver chloride content of at least 90 mol%; and wherein any one of the following conditions a) to e) is satisfied:

a) the silver halide emulsion further has a silver bromide content of 0.1 to 4 mol%, and a silver bromide-containing phase is formed in layer form, or said

emulsion has a region ranging in silver bromide content from 0.5 to 20 mol% at a depth of 20 nm or less below the emulsion grain surface;

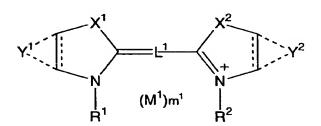
- b) the silver halide emulsion further has a silver iodide content of 0.02 to 1 mol%, and a silver iodide-containing phase is formed in layer form, or said emulsion has a region ranging in silver iodide content from 0.3 to 10 mol% at a depth of 20 nm or less below the emulsion grain surface;
- c) the silver halide emulsion further has a hexacoordinate complex containing iridium as a central metal and having at least two different kinds of coordinate ligands;
- d) the silver halide emulsion is further spectrally sensitized with at least one dye represented by the following formula (SI);

Formula (SI)

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wherein, in formula (SI), X^1 and X^2 each independently represent an oxygen atom, a sulfur atom, a selenium atom, a tellurium atom, a nitrogen atom or a carbon atom; Y^1 represents a group of atoms necessary for forming a furan, pyrrole, thiophene ring or benzene ring which may be condensed with another 5-or 6-membered carbon ring or heterocycle or may have a substituent group; Y^2 represents a group of atoms necessary for forming a benzene ring or a 5- or 6-membered unsaturated heterocycle, which may be further condensed with another 5- or 6-membered carbon ring or heterocycle or may have a substituent group; a bond between two carbon atoms by which Y^1 and Y^2 are each condensed with the carbon ring or the heterocycle may be a single bond or a double bond; one of \mathbb{R}^1 and \mathbb{R}^2 is an alkyl group substituted by an acid group

other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; L¹ represents a methine group; M¹ represents a counter ion; and m¹ represents a number of 0 or more necessary for neutralizing a charge in a molecule; and

 e) the silver halide emulsion further has at least one inorganic sulfur or at least one compound represented by following formula (Z);

Formula (Z)

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R41-S-S-R42

wherein, in formula (Z), R⁴¹ and R⁴² each represent an aliphatic group or 10 an aromatic group independently, or combine with each other to form a ring.

17. The color-image forming method as claimed in claim 16, wherein the support is a reflective support;

wherein the scanning exposure is carried out at a raster interval of 500 μsec or below; and

wherein the color development starts within 12 seconds after completion of the scanning exposure.

- 18. The color-image forming method as claimed in claim 17,
 wherein the silver halide emulsion further has a silver bromide content of 0.1 to 4 mol%, and a silver bromide-containing phase is formed in layer form.
- 19. The color-image forming method as claimed in claim 17, wherein the silver halide emulsion further has a silver bromide content of 0.1 to 4
 25 mol%, and has a region ranging in silver bromide content from 0.5 to 20 mol% at a depth of 20 nm or less below the emulsion grain surface.
 - 20. The color-image forming method as claimed in claim 17,

wherein the silver halide emulsion further has a silver iodide content of 0.02 to 1 mol%, and a silver iodide-containing phase is formed in layer form.

- 21. The color-image forming method as claimed in claim 17,
 wherein the silver halide emulsion further has a silver iodide content of 0.02 to 1 mol%, and has a region ranging in silver iodide content from 0.3 to 10 mol% at a depth of 20 nm or less below the emulsion grain surface.
- 22. The color-image forming method as claimed in claim 17,
 wherein the silver halide emulsion further has a hexacoordinate complex containing iridium as a central metal and having at least two different kinds of coordinate ligands.
- 23. The color-image forming method as claimed in claim 22,
 wherein the hexacoordinate complex containing iridium as a central metal has a halogen ligand and an organic ligand.
- 24. The color-image forming method as claimed in claim 22,
 wherein the hexacoordinate complex containing iridium as a central metal has a
 halogen ligand and another inorganic ligand.
 - 25. The color-image forming method as claimed in claim 16, wherein the scanning light-exposure is carried out during conveying in a horizontal direction such that the silver halide color photographic light-sensitive material is conveyed by means of pairs of conveying rollers comprising hard rollers for image exposure; and wherein the silver halide emulsion is contained in the blue-sensitive silver halide emulsion layer.

26. The color-image forming method as claimed in claim 25, wherein the silver halide emulsion is spectrally sensitized with at least one dye represented by formula (SI) described above.

27. The color-image forming method as claimed in claim 26, wherein the dye represented by the formula (SI) is a dye represented by following formula (SII) or (SIII);

Formula (SII)

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$$V^{15}$$
 V^{16}
 V^{11}
 V^{12}
 V^{12}
 V^{13}
 V^{13}
 V^{14}
 V^{13}
 V^{14}
 V^{13}
 V^{14}
 V^{13}

wherein, in formula (SII), Y^{11} represents an oxygen atom, a sulfur atom or N-R¹³; R^{13} represents a hydrogen atom or an alkyl group; V^{15} and V^{16} each independently represent a hydrogen atom or a monovalent substituent group; X^{11} and X^{12} each independently represent an oxygen atom or a sulfur atom; one of R^{11} and R^{12} is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; V^{11} , V^{12} , V^{13} and V^{14} each independently represent a hydrogen atom or a monovalent substituent group; M^{11} represents a counter ion; and M^{11} represents a number of 0 or more necessary for neutralizing a charge in a molecule;

Formula (SIII)

$$V^{25}$$
 V^{26}
 V^{21}
 V^{21}
 V^{22}
 V^{22}
 V^{23}
 V^{24}
 V^{25}
 V^{25}
 V^{26}
 V^{21}
 V^{22}
 V^{23}
 V^{24}
 V^{25}
 V^{25}
 V^{26}
 V^{27}
 V^{27}
 V^{28}
 V^{29}
 $V^{$

wherein, in formula (SIII), Y²¹ represents an oxygen atom, a sulfur atom or N-R²³, in which R²³ represents a hydrogen atom or an alkyl group; V²⁵ and V²⁶ each independently represent a hydrogen atom or a monovalent substituent group; X²¹ and X²² each represent an oxygen atom or a sulfur atom; one of R²¹ and R²² is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; V²¹, V²², V²³ and V²⁴ each represent a hydrogen atom or a monovalent substituent group; M²¹ represents a counter ion; and m²¹ represents a number of 0 or more necessary for neutralizing a charge in a molecule.

28. The color-image forming method as claimed in claim 26, wherein the dye represented by the formula (SI) is a dye represented by following formula (SIV);

Formula (SIV)

$$V^{32}$$

$$V^{33}$$

$$V^{34}$$

$$V^{35}$$

$$V^{36}$$

$$V^{36}$$

$$V^{37}$$

$$V^{37}$$

$$V^{38}$$

$$V^{37}$$

$$V^{38}$$

$$V^{38}$$

$$V^{38}$$

$$V^{38}$$

$$V^{38}$$

$$V^{38}$$

$$V^{38}$$

$$V^{39}$$

$$V$$

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wherein, in formula (SIV), X³¹ and X³² each represent an oxygen atom or a sulfur atom; one of R³¹ and R³² is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; V³¹, V³², V³³, V³⁴, V³⁵, V³⁶, V³⁷ and V³⁸ each independently represent a hydrogen atom or a monovalent substituent group, in which two adjacent substituent groups of V³¹, V³², V³³, V³⁴, V³⁵, V³⁶, V³⁷ and V³⁸ may combine with each other to form a saturated or unsaturated condensed ring; M³¹ represents a counter ion; and m³¹ represents a number of 0 or more necessary for neutralizing a charge in a molecule.

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29. The color-image forming method as claimed in claim 25, wherein the silver halide emulsion to be exposed contains at least one inorganic sulfur or at least one compound represented by the formula (Z) described above.

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30. The color-image forming method as claimed in claim 25; wherein the hard rollers are rollers formed by providing metal shafts with urethane coatings containing resin beads.

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31. A silver halide color photographic light-sensitive material, comprising a support and photographic constituent layers including at least one bluesensitive silver halide emulsion layer containing a yellow-dye-forming coupler, at least one green-sensitive silver halide emulsion layer containing a magenta-dye-forming coupler, at least one red-sensitive silver halide emulsion layer containing a cyan-dye-forming coupler and at least one light-insensitive hydrophilic colloid layer;

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which forms a color image by image-wise exposure and by photographic processing including a color development process finished within 18 seconds, a bleach-fix process, a rinsing process and a drying process while it is conveyed in

cut sheet form at a speed of 40.0 mm/sec to 100 mm/sec by means of conveying rollers; and

which contains any one component selected from the group consisting of:

- at least one dye-forming coupler represented by the following formula
 (IA),
 - 2) at least one compound represented by the following formula (I), and
 - 3) 1.4 mg/m² or more of at least one compound represented by the following formula (II);

Formula(IA)

wherein, in formula (IA), R' and R" each independently represent a substituent, and Z represents a hydrogen atom, or a group capable of being split-off in a coupling reaction with an oxidized product of an aromatic primary amine color-developing agent;

Formula (I)

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wherein, in formula (I), A represents a substituted or unsubstituted alkyl group, and M represents a cation; and

Formula (II)

wherein, in formula (II), M represents a cation; and R represents an atom having an atomic weight of 100 or lower, or a group having a total molecular weight of 100 or lower.

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32. The silver halide color photographic light-sensitive material as claimed in claim 31,

which comprises at least one dye-forming coupler represented by the following formula (M-1) and at least one dye-forming coupler represented by formula (IA) described above; and

which forms a color image by photographic processing including a color development process finished within 18 seconds, a bleach-fix process finished within 18 seconds, a rinsing process, and a drying process finished within 26 seconds:

Formula (M - I)

wherein, in formula (M-I), R₁, R₂, and R₃ each independently represent a hydrogen atom or a substituent; one of Za and Zb represents a carbon atom having a hydrogen atom or a substituent, and the other represents a nitrogen atom; the substituent of Za or Zb may further have a substituent; and X represents a hydrogen atom or a group capable of being split-off upon a reaction with an oxidized product of an aromatic primary amine color-developing agent.

33. The silver halide color photographic light-sensitive material as claimed in claim 32,

- which undergoes the rinsing process by passing in a horizontal direction through rinse solutions in a tank structurally partitioned into a plurality of rooms with blade-form members.
- 34. The silver halide color photographic light-sensitive material as
 15 claimed in claim 32,
 wherein the conveying speed in the photographic processing is from 45.0 mm/sec to 95 mm/sec.
- 35. The silver halide color photographic light-sensitive material as claimed in claim 32, wherein the dye-forming coupler represented by the formula (M-1) is a dye-forming coupler represented by the following formula (M-III):

Formula (M - III)

wherein, in formula (M-III), R₁, R₂, R₃ and R₄ each independently represent a hydrogen atom or a substituent; and X represents a hydrogen atom or a group capable of being split-off upon a reaction with an oxidized product of an aromatic primary amine color-developing agent.

36. The silver halide color photographic light-sensitive material as claimed in claim 32,

wherein the hydrophilic colloid layer is a layer made up of gelatin hardened substantially with a hardener represented by the following formula (HI);

Formula (HI)

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wherein, in formula (HI), X^{a1} and X^{a2} each independently represent - CH=CH₂ or -CH₂CH₂Y independently; X^{a1} and X^{a2} may be the same or different; Y represents a group capable of being replaced with a nucleophilic group or released in the form of HY by reaction with a base; and L represents a divalent linkage group, which may be substituted.

37. The silver halide color photographic light-sensitive material as claimed in claim 31,

wherein the silver halide color photographic light-sensitive material to be exposed contains at least one dye-forming coupler represented by formula (IA) as described above in at least one of the red-sensitive emulsion layers; wherein the light-sensitive material cut into sheets is conveyed at a speed of 42.0 mm/sec to 100 mm/sec in the photographic processing; and wherein the rinsing process uses a tank structurally partitioned into a plurality of rooms with blade-form members for passing the photographic material cut into sheets through rinse solutions in a horizontal direction.

- 38. The silver halide color photographic light-sensitive material as claimed in claim 37, which is subjected to image-wise exposure using a scanning exposure method on a per-pixel exposure time setting of 1 x 10⁻³ second or shorter.
- 39. The silver halide color photographic light-sensitive material as claimed in claim 37, wherein a total coating amount of silver in the silver halide color photographic light-sensitive material is 0.50 g/m² or below.
- 40. The silver halide color photographic light-sensitive material as claimed in claim 37, which contains at least one compound represented by the following formula (M-II) in at least one green-sensitive silver halide emulsion layer;

Formula (M-II)

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wherein, in formula (M-II), R₁, R₂, R₃ and R₄ each independently represent a hydrogen atom or a substituent; and X represents a hydrogen atom, or a group capable of being split-off in a coupling reaction with an oxidized product of an aromatic primary amine color-developing agent.

41. The silver halide color photographic light-sensitive material as claimed in claim 37,

wherein a processing time in the rinsing process is from 5 seconds to 25 seconds and a processing temperature in the rinsing process is from 40°C to 50°C.

42. The silver halide color photographic light-sensitive material as claimed in claim 31,

which contains at least one compound represented by formula (I) described above and is nipped in and conveyed by two or more pairs of conveying rollers.

43. The silver halide color photographic light-sensitive material as claimed in claim 31,

which contains the at least one compound represented by formula (II) described above in an amount of 1.4 g/m² or greater;

wherein conveying of the silver halide color photographic material is performed by nipping conveying with two or more pairs of conveying rollers.

44. A silver halide color photographic light-sensitive material, comprising a support and photographic constituent layers including at least one bluesensitive silver halide emulsion layer containing a yellow-dye-forming coupler, at least one green-sensitive silver halide emulsion layer containing a magenta-dye-forming coupler and at least one red-sensitive silver halide emulsion layer containing a cyan-dye-forming coupler; wherein the light-sensitive material is subjected to a scanning exposure at a subscan conveying speed of 90 mm/sec or more, and then a color-forming photographic processing, to form a color image; wherein at least one of the silver halide emulsion layers to be exposed contains a silver halide emulsion having a silver chloride content of at least 90 mol%; and wherein any one of the following conditions a) to e) is satisfied:

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- a) the silver halide emulsion further has a silver bromide content of 0.1 to 4

 15 mol%, and a silver bromide-containing phase is formed in layer form, or said

 emulsion has a region ranging in silver bromide content from 0.5 to 20 mol% at a

 depth of 20 nm or less below the emulsion grain surface;
 - b) the silver halide emulsion further has a silver iodide content of 0.02 to 1 mol%, and a silver iodide-containing phase is formed in layer form, or said emulsion has a region ranging in silver iodide content from 0.3 to 10 mol% at a depth of 20 nm or less below the emulsion grain surface;
 - c) the silver halide emulsion further has a hexacoordinate complex containing iridium as a central metal and having at least two different kinds of coordinate ligands;
- d) the silver halide emulsion is further spectrally sensitized with at least one dye represented by the following formula (SI);

Formula (SI)

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$$Y^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^2$$

$$\downarrow^1$$

$$\downarrow^1$$

$$\downarrow^2$$

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$$\downarrow^2$$

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$$\downarrow^1$$

$$\downarrow^2$$

$$\downarrow^2$$

$$\downarrow^1$$

$$\downarrow^2$$

wherein, in formula (SI), X¹ and X² each independently represent an oxygen atom, a sulfur atom, a selenium atom, a tellurium atom, a nitrogen atom or a carbon atom; Y¹ represents a group of atoms necessary for forming a furan, pyrrole, thiophene ring or benzene ring which may be condensed with another 5-or 6-membered carbon ring or heterocycle or may have a substituent group; Y² represents a group of atoms necessary for forming a benzene ring or a 5- or 6-membered unsaturated heterocycle, which may be further condensed with another 5- or 6-membered carbon ring or heterocycle or may have a substituent group; a bond between two carbon atoms by which Y¹ and Y² are each condensed with the carbon ring or the heterocycle may be a single bond or a double bond; one of R¹ and R² is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; L¹ represents a methine group; M¹ represents a counter ion; and m¹ represents a number of 0 or more necessary for neutralizing a charge in a molecule; and

e) the silver halide emulsion further has at least one inorganic sulfur or at least one compound represented by following formula (Z);

Formula (Z)

wherein, in formula (Z), R^{41} and R^{42} each represent an aliphatic group or an aromatic group independently, or combine with each other to form a ring.

45. The silver halide color photographic light-sensitive material as claimed in claim 44, wherein the scanning exposure is carried out at a raster interval of 500 μ sec or below and the color development starts within 12 seconds after completion of the

46. The silver halide color photographic light-sensitive material as claimed in claim 45,

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scanning exposure.

wherein the silver halide emulsion further has a silver bromide content of 0.1 to 4 mol%, and a silver bromide-containing phase is formed in layer form.

47. The silver halide color photographic light-sensitive material as claimed in claim 45,

wherein the silver halide emulsion further has a silver bromide content of 0.1 to 4 mol%, and has a region ranging in silver bromide content from 0.5 to 20 mol% at a depth of 20 nm or less below the emulsion grain surface.

- 48. The silver halide color photographic light-sensitive material as claimed in claim 45,
- wherein the silver halide emulsion further has a silver iodide content of 0.02 to 1 mol%, and a silver iodide-containing phase is formed in layer form.
 - 49. The silver halide color photographic light-sensitive material as claimed in claim 45,
- wherein the silver halide emulsion further has a silver iodide content of 0.02 to 1 mol%, and has a region ranging in silver iodide content from 0.3 to 10 mol% at a depth of 20 nm or less below the emulsion grain surface.

50. The silver halide color photographic light-sensitive material as claimed in claim 45,

wherein the silver halide emulsion further has a hexacoordinate complex containing iridium as a central metal and having at least two different kinds of coordinate ligands.

51. The silver halide color photographic light-sensitive material as claimed in claim 50;

wherein the hexacoordinate complex containing iridium as a central metal has a halogen ligand and an organic ligand.

52. The silver halide color photographic light-sensitive material as claimed in claim 50;

wherein the hexacoordinate complex containing iridium as a central metal has a halogen ligand and another inorganic ligand.

53. The silver halide color photographic light-sensitive material as claimed in claim 44,

wherein the scanning light-exposure is carried out during conveying in a horizontal direction such that the silver halide color photographic light-sensitive material is conveyed by means of pairs of conveying rollers comprising hard rollers for image exposure; and

wherein the silver halide emulsion is contained in the blue-sensitive silver halide emulsion layer.

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54. The silver halide color photographic light-sensitive material as claimed in claim 53,

wherein the silver halide emulsion is further spectrally sensitized with at least one

dye represented by the formula (SI) as described above.

- 55. The silver halide color photographic light-sensitive material as claimed in claim 54.
- wherein the dye represented by formula (SI) is a dye represented by the following formula (SII) or (SIII);

Formula (SII)

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$$V^{15} \xrightarrow{V^{16}} X^{11} \xrightarrow{X^{12}} CH \xrightarrow{X^{12}} V^{12} \xrightarrow{V^{13}} K^{11} K^{11} K^{12} K^{12} K^{13} K^{13}$$

$$(M^{11})m^{11}$$

wherein, in formula (SII), Y¹¹ represents an oxygen atom, a sulfur atom or N-R¹³; R¹³ represents a hydrogen atom or an alkyl group; V¹⁵ and V¹⁶ each independently represent a hydrogen atom or a monovalent substituent group; X¹¹ and X¹² each independently represent an oxygen atom or a sulfur atom; one of R¹¹ and R¹² is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; V¹¹, V¹², V¹³ and V¹⁴ each independently represent a hydrogen atom or a monovalent substituent group; M¹¹ represents a counter ion; and m¹¹ represents a number of 0 or more necessary for neutralizing a charge in a molecule;

Formula (SIII)

$$V^{25}$$
 V^{26}
 V^{26}
 V^{21}
 V^{21}
 V^{22}
 V^{22}
 V^{23}
 V^{24}
 V^{25}
 V^{25}
 V^{26}
 V^{21}
 V^{22}
 V^{23}
 V^{24}
 V^{25}
 $V^{$

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wherein, in formula (SIII), Y^{21} represents an oxygen atom, a sulfur atom or N-R²³, in which R²³ represents a hydrogen atom or an alkyl group; V^{25} and V^{26} each independently represent a hydrogen atom or a monovalent substituent group; X^{21} and X^{22} each independently represent an oxygen atom or a sulfur atom; one of R²¹ and R²² is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; V^{21} , V^{22} , V^{23} and V^{24} each represent a hydrogen atom or a monovalent substituent group; M^{21} represents a counter ion; and M^{21} represents a number of 0 or more necessary for neutralizing a charge in a molecule.

56. The silver halide color photographic light-sensitive material as claimed in claim 54, wherein the dye represented by the formula (SI) is a dye represented by following formula (SIV);

Formula (SIV)

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15

$$V^{32}$$
 V^{31}
 V^{31}
 V^{35}
 V^{36}
 V^{33}
 V^{34}
 V^{31}
 V^{31}
 V^{32}
 V^{35}
 V^{36}
 V^{37}
 V^{37}
 V^{37}
 V^{38}
 V^{39}
 V

wherein, in formula (SIV), X³¹ and X³² each represent an oxygen atom or a sulfur atom; one of R³¹ and R³² is an alkyl group substituted by an acid group other than a sulfo group, and the other is an alkyl group substituted by a sulfo group; V³¹, V³², V³³, V³⁴, V³⁵, V³⁶, V³⁷ and V³⁸ each independently represent a hydrogen atom or a monovalent substituent group, in which two adjacent substituent groups of V³¹, V³², V³³, V³⁴, V³⁵, V³⁶, V³⁷ and V³⁸ may combine with each other to form a saturated or unsaturated condensed ring; M³¹ represents a counter ion; and m³¹ represents a number of 0 or more necessary for neutralizing a charge in a molecule.

- 57. The silver halide color photographic light-sensitive material as claimed in claim 53,
- wherein the silver halide emulsion further has at least one inorganic sulfur or at least one compound represented by formula (Z) described above.
 - 58. The silver halide color photographic light-sensitive material as claimed in claim 53,
- wherein the hard rollers are rollers formed by providing metal shafts with urethane coatings containing resin beads.